ON GIVING A TECHNICAL PRESENTATION

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OVERVIEW

We assume...

— technical content
— technical audience
— time limit

Given as a...

— short class presentation
— conference talk (20–30 minutes)
— full seminar (50 minutes)

Today’s Outline

1. Speaking Environment
2. Speaker
3. Content
4. Visual Aids
5. Top-Ten List: What to Do
6. Rardin’s List: What not to Do
7. Some References
1. SPEAKING ENVIRONMENT

Components

— Speaking area
— Visual aids (screen, projector, blackboard, none)
— Audience

Names of Things

— "Dais" = "rostrum" = raised platform
  – "Podium" = dais used by orchestra conductors
  – "Pulpit" = dais used by clergy
— "Lectern" = reading desk
— "A speaker stands behind a lectern on a dais."

Before speaking, check the environment. How to...

— get to the speaking position.
— turn on visual aid(s).
— be heard.
— be seen (you and visual aids).
— know the time.
— how to leave.
1. Speaking Environment

2. SPEAKER

   — How to begin?
   — The title slide?
   — Where to stand?
   — Where to look?
   — How to talk?
   — Where to point?
1. Speaking Environment
2. Speaker

3. CONTENT

Aristotle’s Big 3
— Ethos: establish who you are.
— Pathos: establish motivation.
— Logos: reach a clean conclusion (logically, quickly).

U.S. Military’s Big 3
— Tell them what you are going to tell them.
— Tell them.
— Tell them what you told them.

Schmeiser’s Big 3 (for a technical seminar)
— Define the problem, its context, its motivation.
— Define properties of a good solution.
— Discuss your solution.

Rardin’s Big 3 (for an interviewing seminar)
— Prove that you can teach.
— Prove that you can communicate with peers.
— Prove that you can blow them away.
4. VISUAL AIDS

— Blackboard. Good luck.

— Slides (Viewgraphs, TeX Beamer, MSPowerpoint...)

  – One slide, one idea. Headings.

  – One slide, 2–3 minutes.


  – Hiding content. Hmmm?

  – If slide used twice, have two.
1. Speaking Environment
2. Speaker
3. Content
4. Visual Aids

5. TOP-TEN LIST: WHAT TO DO

(1) Know how to turn on and to focus the projector.
(2) Include only an appropriate level of detail.
(3) Define terminology, notation, parts of figures. Reinforce.
(4) Explain, rather than read, the slides.
(5) Stand to block nobody. Move.
(6) Avoid distractions (e.g., touching the overhead).
(7) Talk to audience, not to projector, not to screen.
(8) Avoid saying "I know that you can’t read this".
(9) Occasionally, be silent. Allow for questions.
(10) Be flexible. Elaborate or omit as needed.
1. Speaking Environment
2. Speaker
3. Content
4. Visual Aids
5. Top-Ten List: What to Do.

6. RARDIN’S LIST: WHAT NOT TO DO

(1) Not bringing along the WHOLE audience for at least one-third of the talk.

(2) Not explaining why the listener should be interested.

(3) Failing to show the forest first, then the trees.

(4) Introducing unnecessary notation.

(5) Dwelling on "regularity assumptions" that may be needed for rigor, but not for insight.

(6) Making definitions without motivating them, with e.g. examples.

(7) Dense slides, so that the listener must EITHER read or listen, but cannot do both.

(8) Sparse slides, so that the listener must wait for several slides to get a single idea.

(9) Not repeating parts of earlier slides, so that the listener has to remember something nontrivial for an earlier slide to understand the current slide.
1. Speaking Environment
2. Speaker
3. Content
4. Visual Aids
5. Top-Ten List: What to Do.
6. Rardin’s List: What Not to Do

7. SOME REFERENCES


Center for Instructional Excellence, Purdue University, "www.cie.purdue.edu/".

